IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please **AMEND** the claims and **CANCEL** claims 2, 3, 13, and 14 in accordance with the following:

1.   (CURRENTLY AMENDED) An interactive data analysis support apparatus for supporting the analysis of data, said apparatus comprising:

random extraction means for automatically extracting a random sampling of data from contents of ~~the~~ <u>a</u> data warehouse;

cross tabulation display means for displaying <u>a cross tabulation</u> according to summing up conditions <u>for defining the range of the data to be displayed</u> ~~to set a range to be displayed a cross tabulation~~ in which the random sampling of data extracted from the contents of the data warehouse by the random extraction means is cross summed up;

cell specifying means for specifying at least one cell among a number of cells constituting said cross tabulation; and

graph display means for displaying the random sampling of data extracted from the contents of the data warehouse as a graph within the range of the cell specified by said cell specifying means<u>,</u>

<u>wherein said graph display means comprises:</u>

<u>display limiting means for limiting the range of the data to be displayed; and</u>

<u>storage means for storing the range of the data to be displayed which is limited by said display limiting means as a summing up condition used by said cross tabulation display means, and said cross tabulation display means is capable of displaying cross tabulation in which the random sampling of data extracted from the database is cross-summed up according to the summing up condition stored by said storage means.</u>

2.   (Canceled)

3.   (Canceled)

4.   (CURRENTLY AMENDED)   ~~An~~ <u>The</u> interactive data analysis support apparatus

2

according to claim 1, wherein said graph display means comprises rearranging means for automatically rearranging in a graph the data to be displayed according to predetermined conditions.

5. (CURRENTLY AMENDED) ~~An~~ The interactive data analysis support apparatus according to claim 4, wherein said graph display means stores, in said storage means, a summing up condition for limiting the range of the ~~comprises storage means for storing~~ data to be displayed based upon the data which is rearranged by said rearranging means ~~as a summing up condition used by said cross tabulation display means, and said cross tabulation display means is capable of displaying cross tabulation in which the data extracted at random from the contents of the data warehouse is cross-summed up according to the summing up condition stored by said storage means~~.

6. (CURRENTLY AMENDED) ~~An~~ The interactive data analysis support apparatus according to claim 1, wherein said graph display means comprises:
automatic analyzing means for finding a new display item by extracting a characteristic of the random sampling of data extracted from the contents of the data warehouse, and display item-adding means for adding the new display item found by said automatic analyzing means to the graph.

7. (CURRENTLY AMENDED) ~~An~~ The interactive data analysis support apparatus according to claim 6, wherein
said graph display means stores, in said storage means, a summing up condition for limiting the range of the data to be displayed based upon ~~comprises storage means for storing~~ the new display item, added by said display item-adding means ~~as a summing up condition used by said cross tabulation display means, and said cross tabulation display means is capable of displaying cross tabulation in which the random sampling of data extracted from a database is cross-summed up according to the summing up condition stored by said storage means~~.

8. (CURRENTLY AMENDED) ~~An~~ The interactive data analysis support apparatus according to claim 1, wherein the random sampling of data extracted from the contents of said data warehouse is an aggregate of records composed of a number of data items.

9. (CANCELLED)

10.   (CURRENTLY AMENDED) An-The interactive data analysis support apparatus according to claim 8, wherein said graph display means has a structure such that a graph is displayed designating said data item as an axis.

11.   (CURRENTLY AMENDED) An- The interactive data analysis support apparatus according
to claim 10, wherein said graph display means comprises the same number of axes as the data items constituting said records, and plots a point corresponding to a value of each data item with regard to each of said records, to thereby display a graph in which points plotted on adjacent axes are connected by a segment.

12.   (CURRENTLY AMENDED) A medium on which is recorded an interactive data analysis support program for supporting the analysis of data wherein there is recorded at least a program for executing:
        a random extraction operation extracting a random sampling of data automatically from contents of a data warehouse;
        a cross tabulation display operation displaying a cross tabulation according to summing up conditions for defining the range of the data to be displayed to set a range to be displayed a cross tabulation in which the random sampling of data extracted from the contents of the data warehouse by the random extraction operation is cross-summed up;
        a cell specifying operation specifying at least one cell among a number of cells constituting said cross tabulation; and
        a graph display operation displaying the random sampling of data extracted from the contents of the data warehouse as a graph within the range of the cell specified by said cell specifying operation,
            wherein said graph display operation comprises:
                a display limiting operation for limiting the range of the data to be displayed; and
                a storage operation for storing the range of the data to be displayed which is limited by said display limiting operation as a summing up condition used by said cross tabulation display operation, and said cross tabulation display operation is capable of displaying cross tabulation in which the random sampling of data extracted from the contents of the data warehouse is cross-summed up according to the summing up condition stored by said storage operation.

13.   (CANCELED)

4

14.   (CANCELED)

15.   (CURRENTLY AMENDED) ~~A~~ The medium on which is recorded an interactive data analysis support program according to claim 12, wherein said graph display operation comprises a rearranging operation for automatically rearranging in a graph the data to be displayed according to predetermined conditions.

16.   (CURRENTLY AMENDED) ~~A~~ The medium on which is recorded an interactive data analysis support program according to claim 15, wherein said graph display operation stores, in said storage operation, a summing up condition for limiting the range of the ~~comprises a storage operation storing~~ data to be displayed, based upon the data which is rearranged by said rearranging operation ~~as a summing up condition used by said cross tabulation display operation, and said cross tabulation display operation is capable of displaying cross tabulation in which the random sampling of data extracted from a the contents of the data warehouse is cross-summed up according to the summing up condition stored by said storage operation~~.

17.   (CURRENTLY AMENDED)   ~~A~~ The medium on which is recorded an interactive data analysis support program according to claim 12, wherein said graph display operation comprises:
    an automatic analyzing operation for finding a new display item by extracting a characteristic of the random sampling of data extracted from the contents of the data warehouse, and a display item-adding function for adding the new display item found by said automatic analyzing operation to the graph.

18.   (CURRENTLY AMENDED) ~~A~~ The medium on which is recorded an interactive data analysis support program according to claim 17, wherein said graph display operation stores, in said storage operation, a summing up condition for limiting the range of the data to be displayed ~~comprises a storage operation for storing~~ based upon the new display item, added by said display item-adding operation ~~as a summing up condition used by said cross tabulation display operation, and said cross tabulation display operation is capable of displaying cross tabulation in which the random sampling of data extracted from the contents of the data warehouse is cross-summed up according to the summing up condition stored by said storage operation~~.

5

19.   (CURRENTLY AMENDED) A The medium on which is recorded an interactive data analysis support program according to claim 12, wherein the random sampling of data extracted from the contents of the data warehouse is an aggregate of records composed of a number of data items.

20.   (CANCELLED)

21.   (CURRENTLY AMENDED) A The medium on which is recorded an interactive data analysis support program according to claim 19, wherein said graph display operation has a structure such that a graph is displayed designating said data item as an axis.

22.   (CURRENTLY AMENDED) A The medium on which is recorded an interactive data analysis support program according to claim 21, wherein said graph display operation comprises the same number of axes as the data items constituting said records, and plots a point corresponding to a value of each data item with regard to each of said records, to thereby display a graph in which points plotted on adjacent axes are connected by a segment.

23.   (CURRENTLY AMENDED) An interactive data analysis support apparatus for supporting the analysis of data, said apparatus comprising:
a random extraction device automatically extracting a random sampling of data from contents of the a data warehouse;
a cross tabulation display device displaying a cross tabulation according to summing up conditions to set a range to be displayed a cross tabulationfor defining the range of the data to be displayed in which the random sampling of data automatically extracted from the contents of the a data warehouse is cross summed up;
a cell specifying device specifying at least one cell among a number of cells constituting said cross tabulation; and
a graph display device displaying the random sampling of data extracted from the contents of the data warehouse as a graph within the range of the cell specified by said cell specifying means,
wherein said graph display device comprises:
a display limiting device for limiting the range of the data to be displayed; and

a storage device for storing the range of the data to be displayed which is limited by said display limiting device as a summing up condition used by said cross tabulation display device, and said cross tabulation display device is capable of displaying cross tabulation in which the random sampling of data extracted from the contents of the data warehouse is cross-summed up according to the summing up condition stored by said storage device.

24.   (CURRENTLY AMENDED) An The interactive data analysis support apparatus according to claim 23, wherein said graph display device comprises display limiting device stores, in said storage device, a summing up condition for limiting the range of the data to be displayed by based upon an operation in a graph.

25.   (CURRENTLY AMENDED) An The interactive data analysis support apparatus according
to claim 23, wherein said graph display device comprises a rearranging device for automatically rearranging in a graph the data to be displayed according to predetermined conditions.

26. (CURRENTLY AMENDED) An The interactive data analysis support apparatus according to claim 23, wherein said graph display means comprises:
an automatic analyzing device finding a new display item by extracting a characteristic of the random sampling of data extracted from the contents of the data warehouse, and a display item-adding device adding the new display item found by said automatic analyzing device to the graph.